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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

HARMAN et al

Atty. Ref.: 604-773

Serial No. 10/571,608

TC/A.U.: Unassigned

Filed: March 10, 2006

Examiner: Unassigned

For: APPARATUS AND METHOD FOR DISPENSING FOAM

\* \* \* \* \*

August 14, 2006

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO/SB/08a. Also attached is a copy of a Search Report which has been prepared in this case.

This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO/SB/08a and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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Sheet 1 of 1

## INFORMATION DISCLOSURE CITATION

ATTY. DOCKET NO.

604-773

**APPLICANT**

HARMAN et al

(Use several sheets if necessary)

**FILING DATE**

SERIAL NO.

10/571,608



FILING DATE

TC/A.U.  
Unassigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	FILING DATE		
				CLASS	SUBCLASS	IF APPROPRIATE
	3,540,448	11/1970	Sonnen			
	3,656,482	04/1972	Sonnen			
	3,955,571	05/1976	Sonnen et al			
	3,970,219	07/1976	Spitzer et al			
	4,019,657	04/1977	Spitzer et al			
	4,141,472	02/1979	Spitzer et al			
	4,174,386	11/1979	Spitzer et al			
	4,724,615	02/1988	Mackles et al			
	6,612,468	09/2003	Pritchett et al			
	2002/0070238 A1	06/2002	Pritchett et al			
	2002/0010418 A1	01/2002	Lary et al			
	2002/0147462 A1	10/2002	Mair et al			

## FOREIGN PATENT DOCUMENTS

DOCUMENT		DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	NO
	CA 2 238 118	01/2006	CA				
	DE 1 926 796	03/1970	DE				
	EP 1 189 818 B1	06/2003	EP				
	EP 1 190 775 A1	03/2002	EP				
	FR 1,400,129	03/1965	FR				
	FR 2,140,341	01/1973	FR				
	FR 2,710,558	04/1995	FR				
	FR 2,775,436	09/1999	FR				
	WO 00/66274 A1	11/2000	WO				
	WO 00/72821 A1	12/2000	WO				
	WO 02/41872 A1	05/2002	WO				
	WO 97/02909 A1	01/1997	WO				
	WO 99/43371 A1	09/1999	WO				

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)**

\*Examiner

### Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

**SEARCH REPORT**

Your Ref: 144499

Our Ref: 301002/JR/sp

A Novelty Search was conducted in respect of a method and apparatus for generating and dispensing microfoam which may be used in the sclerotherapy of varicose veins. The foam may be generated using a pressurized container and dip tube (though other methods of producing foam may be used). The initial foam produced at each use contains macro bubbles and so is unsuitable for use. The following methods have been proposed to discard the initial quantity of foam produced and transfer the flow to a container for use without interrupting the foam flow:

- a. a switchable valve which maintains flow at all times. The flow may be to a waste outlet, to a usable foam port, or to a usable foam port with permanently open bleed to another waste outlet. The usable foam outlet may be a luer connector for receiving the luer nozzle of a syringe.
- b. a simple on/off valve arrangement with permanently open bleed passage.
- c. a transparent container for waste foam to allow visual inspection of the quality.
- d. a fixed volume waste container which may be filled with the foam initially produced before an automatic switch, via a higher flow resistance port, to the dispensing device.

**Results:**

Number	Equivalents			Comments
FR 1400129				1
FR 2140341				1
FR 2775436				2
US 3540448	DE 1902656	GB 1242334		2a
US 3656482				2a
US 3955571	DE 2514562	GB 1473426		1, 2a
US 3970219	DE 2608771	GB 1547804		3
US 4019657				
US 4174386				
US 4141472	GB 1555044			3
US 4724615				1
US 20020010418				4a
US 20020147462				4b
WO 9943371	FR 2775433			2
WO 0066274				4c
WO 0241872				4ci

**Comments on Results:**

Our searches have failed to locate any references considered to be of relevance. Nevertheless, we believe that the search was focused in the most likely areas to uncover prior art.

No specifications were noted in which the first portion of foam dispensed could be discarded by either manual or automatic means.

Comments on the individual references are as follows:

1. Methods of dispensing foam from an aerosol to a transparent container for measuring quantity rather than quality.
2. A syringe is filled with foam
  - a) from an aerosol.
3. Aerosol containers for delivering foams.
4. The use of a microfoam as a sclerosing agent:
  - a) delivered via a catheter.
  - b) using a two-syringe mixing system.
  - c) using a propellant gas source and delivery valve,
    - i) which may be connected to a syringe.

Known cases and equivalents thereof have been excluded from this report.

### Field of Search: Manual Searches

The EPC is applied retrospectively, and it takes on average eight months to be applied to a given patent publication.

The latest dates reflect when the EPC records were consulted, and not the actual dates of the patent publications.

The EPC search has been updated/supplemented by an IPC search.

Classification/Indexing System	Country/ Body	From	To
European Patent Office Classification (EPC)		(Date style DD/MM/YYYY)	
A61B <u>17/00P</u>	DE	01.01.1920	08.01.2003
A61K <u>9/12B</u>	EPO	20.12.1978	08.01.2003
A61M <u>5/178F</u>	FR	01.01.1920	08.01.2003
B05B <u>7/00C</u>	GB	01.01.1920	08.01.2003
B65D <u>83/14F, 14W, 14W1, 14W2, 16B2</u>	US	01.01.1920	08.01.2003
	WIPO(PCT)	19.10.1978	08.01.2003

### Field of Search: Computerised Searches

Our classification-based 'manual' searches have been supplemented by searches through electronic records, as follows:

Source	Period	Countries/Bodies	Keywords (*indicates any word ending) (w=adjacency in specified order)	Classes IPC/EPC (*indicates any ending)
On-line	1980 to 2003	DE, EPO, FR, GB, US, WIPO(PCT)	*foam*, mouss*	<u>A61B 17/00/IPC</u> <u>A61M 37/00</u> <u>A61P 9/14/IPC</u>
			microfoam*, macrofoam*, micro(w)foam*, macro(w)foam*, foam*, mouss*, inspect*, visual*, automat*, wast*, discard*	<u>A61J 1/00/IPC</u> <u>A61J 1/00M/EPC</u> <u>B05B 7/00*</u> <u>A61K 9/12*</u>
			mouss*, microfoam*, macrofoam*, micro(w)foam*, macro(w)foam*, sclero*, varic*, inject*, foam*, wast*, discard*	Unrestricted

**Notes on Computerised Searches:**

The vast majority of computerised sources (databases) are incomplete. All of the stated records are rarely present, particularly for the most recent publications "covered" by the database. In addition, for databases covering more than one publishing body, the recording of patent family members (equivalents) is not comprehensive. For these reasons it is our practice to conduct database searches as a supplement to classification-based 'manual' searches. Only in cases where there are tight budgetary constraints do we consider conducting an entire search 'electronically'.

The periods covered are approximate. The date range corresponds to the earliest and latest publications, not necessarily from the same publishing body in the case of databases covering the publications of multiple patent offices.

Selected records from the field of search defined above will have been examined. These records will have been identified by employing strategies using keywords and/or classes. A successful strategy for one database is not necessarily appropriate to another database.

Some databases offer additional facilities such as backward/forward citation searching or patent family searches. Where appropriate these facilities will have been used.

**Recommendations for Extension:**

In addition to the headings covered by the search, we have identified others that are promising. In our opinion, there is a reasonable possibility of pertinent material being indexed there. The additional headings are as follows:

EPC: B05B 7/00C1, 00C1A, 00C1A1, 00C1A2, 00D  
A61B 17/12P; A61K 9/12, 12D; A61J 1/00M

The definitions of the above classifications are enclosed.

**Notes:**

Equivalents, where listed, have been obtained from readily available sources. Systematic equivalent searches have not been conducted.

It will, of course, be appreciated that there is always the possibility of pertinent patents not having been cross-referenced into the appropriate sub-classes and our search is thus dependent upon the accuracy and the completeness of the classification.

*ooo ENDS ooo*